No. 94-2003

In The

Supreme Court of the United States

October Term, 1995

LOTUS DEVELOPMENT CORPORATION,

Petitioner,

v.

BORLAND INTERNATIONAL, INC.,

Respondent.

On Writ Of Certiorari
To The United States Court Of Appeals
For The First Circuit

BRIEF AMICUS CURIAE OF SOFTWARE INDUSTRY COALITION JOINED BY THE COMPUTER SOFTWARE INDUSTRY ASSOCIATION IN SUPPORT OF RESPONDENT

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I. INTRODUCTION AND INTEREST OF AMICUS

The signatories below have received consent to file this brief from both Petitioner and Respondent.

The Software Industry Coalition ("Coalition") is a non-profit mutual benefit corporation that is dedicated to improving the quality and effectiveness of products, processes, and relationships in the software industry. Our mission is to identify specific projects and to build collaborative relationships to facilitate an industry consensus on software issues, to act as a catalyst in resolving those issues, and to present a coordinated software industry voice. Members of the Coalition include companies whose primary products are software, companies whose primary products are hardware for which software is a significant component, companies that provide information services, companies that provide significant professional services to software companies, and government technology laboratories.[1]

The Computer Software Industry Coalition ("CSIA") is a non-profit organization that monitors proposed legislation and regulation affecting the computer software industry, disseminates that information to the industry,

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[1] Although respondent Borland International, Inc. is a member of the Coalition, it has abstained from the decision to file this brief. Borland is not a member of the Computer Software Industry Association. This brief was approved pursuant to the balloting procedures of the signatory organizations who exercised complete control over its editorial contents. Borland helped to defray the costs of printing this brief.

works to form industry consensus, and communicates industry positions to legislative bodies. CSIA represents over 3,000 companies and professional individuals in the software industry.

Although we in the software industry rely upon the copyright law as an essential means of protection for our investment in the development of new and beneficial software products, we are strongly of the view that the overextension of copyright protection would have severe adverse consequences for our industry. The decision of the First Circuit gave the industry the two things it desires most from the copyright law: an appropriate level of protection, and clear-cut guidelines to determine its boundaries. The Coalition files this brief to make known the perspective of the software industry on these issues, and to urge the Court to affirm the decision of the First Circuit.

II. SUMMARY OF THE ARGUMENT

The Coalition was extremely concerned about the implications of the District Court's decision. The District Court appeared to believe that it could not give software developers too much of a good thing, as if because Lotus had developed a good software product, copyright should be extended to protect even the functional features of that product. Such thinking is misguided.

Indeed, in our experience, progress in the software industry is jeopardized more by drawing the bounds of intellectual property protection too broadly than by drawing them narrowly. In the 1976 Copyright Act, and

in the 1980 amendments, Congress heeded the software industry's request for protection from copying of the code of computer programs. However, the industry did not seek – nor did Congress provide – protection for mere functional aspects of computer programs, including methods of operation and the like, such as the arrangement of menu commands. Such protection remains unwanted to this day, as amply reflected by the fact that of the thousands of true software developers in this country, not one has filed a memorandum in support of Lotus' position. Under such circumstances, Lotus' protestation of concern for protecting the "lifeblood" of the software industry (Brief for the Petitioner, p. 49) rings hollow.

The Coalition, by contrast, which has many developer members, is representative of the software industry. The Coalition does not believe, contrary to Lotus' claims, that the reasoning of the Court of Appeals in any way jeopardizes our continued ability to obtain needed copyright protection for our computer code.

To say that denial of protection for mere methods of operation will render software products unprotected by copyright is to misunderstand the true purpose of copyright protection of software. The creation of new and original expression to produce a given result in a software product is specifically permitted by the copyright laws. However, the greatest protection copyright affords for software is as a weapon against identical reproduction of the software code.

Software code is essentially comprised of pure digital information. Its identical reproduction is easily, inexpensively, and rapidly accomplished. The software industry

loses millions, even billions, of dollars yearly from such exact duplication and subsequent free or piratical distribution. "Pirates" are not bothering to create new and original expressions; they are merely copying the originals. Copyright is the essential means of proving and deterring such activity.

Thus, we believe that the decision of the First Circuit strikes the proper balance between giving sufficient copyright protection to protect against software piracy, while not stifling the development of innovation in the industry. Moreover, the decision sets forth a clear, discernible rule against which we in the industry can measure our conduct, to make reasonable predictions regarding which elements are, and which are not, subject to copyright protection. For all of these reasons, we urge affirmance of the decision below.

III. ARGUMENT

Both Lotus and its amici have stressed the dynamism and the importance of the American software industry. Lotus, for example, describes it as a "dynamic" and "vibrant" national industry. Brief for the Petitioner, p. 16, 49. The brief for DEC, Intel, Xerox, and Gates Rubber similarly describes computer software as "one of the fastest-growing sectors in our national economy," with the

United States holding a dominant 75% share of the $70 billion worldwide market.[2]

As members of the software industry, we agree that it is a vital component of the American economy. We believe, however, that its health would be impaired, not improved, by the copyright regime Lotus proposes.

A. The Decision of the First Circuit Maintains the Level of Copyright Protection Necessary to Encourage Software Development.

As computer software developers, we recognize the important role served by copyright in protecting our investment in the creation of computer programs. In particular, because the text of a computer program – the "code" – is difficult and costly to write, but easy and cheap to copy, we believe that copyright is critical in protecting against the unauthorized copying, distribution, and deployment of programs by software "pirates." Inadequate protection would serve as a major disincentive to software development by eroding the prospect of appropriate compensation to software developers through software licensing or sales.

These concerns were the principal focus of the hearings before the National Commission on New Technological Uses of Copyrighted Works ("CONTU"). *See* CONTU

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[2] Brief of Digital Equipment Corporation, the Gates Rubber Company, Intel Corporation and Xerox Corporation in Support of Petitioner ("Hardware Cos. Brief"), p. 2.

Final Report at 11 (because "the cost of developing computer programs is far greater than the cost of their duplication," protection is required "to encourage the creation and broad distribution of computer programs"). Based on this concern, CONTU recommended, and Congress enacted, the 1980 amendment to the 1976 Copyright Act, which confirmed that computer program code is protectable under copyright.

Congress did not, however, either in 1976 or in 1980, extend this copyright protection for computer programs to mere functional aspects such as methods of operation, as the First Circuit recognized the Lotus menu command hierarchy to be. Not only does that structure fail to meet the statutory definition of "computer program,"[3] but the CONTU Final Report made it clear that copyright protection for the program must be determined separately from copyright for its output. (Output includes the on screen environment which is manifest by reason of the computer software's instructions, much as the printout from the computer's printer is manifest, except that the on screen "output" is usually manipulable, as is the case with the menu command hierarchy.)

In discussing the relationship between the program and its output, the Vice-Chairman of CONTU, Professor Nimmer, proposed that a program be copyrighted only when the program's output also qualified separately for

[3] Under the Copyright Act, a computer program is "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." 17 U.S.C. § 101. In this definition, the program's output is the "certain result" that is effected by running the program.

copyright protection. However, the CONTU Final Report ultimately rejected that position, concluding that there should "be no distinction made between programs which are used in the production of further copyrighted works and those which are not." *Id.* at 21. Under this analysis, therefore, the program's output may – or may not – be a work that itself qualifies for copyright protection. The question of the output's qualification for copyright protection, however, in no way jeopardizes the protection that the developer has in the program itself.

In our view, the First Circuit's decision fully accords with this separate copyright treatment of the program and its output, respectively. Thus, the Court of Appeals' analysis of whether there is copyright protection in the arrangement of Lotus' menu tree is entirely independent of the viability of copyright protection for Lotus' 1-2-3 code.[4] Rather, the Court of Appeals correctly determined that the program's output, including the arrangement

[4] The Coalition expresses no view whether some level of abstraction away from the program's code – for example, what is often referred to as the "structure, sequence, and organization" of the code – is protected under copyright. *Compare Whelan Associates, Inc. v. Jaslow Dental Laboratory, Inc.*, 797 F.2d 1222, 1248 (3d Cir. 1986), *cert. denied*, 479 U.S. 1031 (1987) (recognizing such protection) *with Computer Associates Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 711-12 (2d Cir. 1992) (criticizing breadth of protection under *Whelan*). The issue simply is not presented in this case. No matter how high a level of abstraction one considers, the *Whelan/Altai* debate turns on the similarity at that level of the programs' *code*. Here, Lotus' claim is that Borland could not copy its menu screen output, even though there was nothing in common between the two programs at any level of abstraction. Indeed, Lotus did not even put its code into evidence. Trial Tr. of Apr. 1, 1993, p. 5-136 - 5-137, JA 300.

and structure of its menu tree, must be evaluated separately on its own merits. *Lotus Development Corp. v. Borland Int'l, Inc.*, 49 F.3d 807, 815-16 (1st Cir. 1995), Pet. App. 16a-18a. Because Lotus did not contend that Borland had copied the look of its screen displays, *id.*, the Court expressly did not reach the question whether the 1-2-3 screen displays, *per se*, enjoy copyright protection.[5] *Id.* at 815-16 & n.10, Pet. App. 16a. Similarly, the Lotus "long prompts" – the longer, more descriptive explanations of 1-2-3 commands – were not before the Court on appeal. *Id.* at 815 & n.9, Pet. App. 16a.

What remained was the question whether the words, order, and arrangement of the 1-2-3 menu tree constituted a copyrightable work. On this question, the Court of Appeals' analysis was clear and intuitive: the menu tree serves the same intrinsic functional purposes as the buttons of a VCR, and hence, like the buttons, is a "method of operation," specifically excluded from copyright under 17 U.S.C. § 102(b). *Id.* at 817, Pet. App. 18a-20a.

The Coalition recognizes that the dividing line between intrinsically functional aspects and copyrightable expression may not always be as clear as we and the First Circuit believe it to be in this case. Nevertheless, we believe that the Court of Appeals' approach is good law – narrow, easy to implement, and likely to lead to consistent determinations regarding the scope of copyright protection for computer program outputs. As such

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[5] Lotus has acknowledged that there is no claimed similarity between the two programs in "the color, style, layout, or format in which the words or menus are displayed on the screens." Brief for Petitioner, p. 6 n.8.

consistency provides clear roadmarks to secure future software development efforts, it is extremely important to Coalition members, and is in marked contrast to the confusing literal/non-literal analysis followed by the District Court and urged by Lotus and its amici.

It also bears mentioning that the use of software has proliferated into practically every market; thus, if software innovation is chilled in an atmosphere of overbroad copyright protection, there will arise a very clear potential of adversely impacting virtually every aspect of American business.

B. The First Circuit's Decision Does Not Leave the Software Industry With Inadequate Intellectual Property Rights.

Lotus' amici warn that the Court of Appeals' decision will have "a substantial and detrimental effect" on the software industry. Hardware Cos. Brief, p. 17. First, they contend that the appellate court's decision, by unduly restricting the scope of copyright, undermines a system of protection under which the industry has been able "to flourish and grow." *Id.* Second, they suggest that because user interface design "requires a substantial investment in creative expression," the failure to extend copyright protection to such efforts will "undermine [the] incentives to innovate." *Id.* at 18. The Coalition disagrees on both counts.

To begin with, the American software industry has not prospered because of, or even during, a regime of overly broad copyright protection. Indeed, during the crucial formative years of the industry, the industry

looked for guidance to Judge Patrick Higgenbotham's decision in *Synercom Technology, Inc. v. University Computing Co.*, 462 F. Supp. 1003 (N.D. Tex. 1978). In that decision, Judge Higgenbotham denied copyright protection to the plaintiff's format for data input, which the defendants had used in order to make their respective programs compatible without loss of data. *Id.* at 1008. The decision in *Whelan Associates, Inc. v. Jaslow Dental Laboratory, Inc.*, 797 F.2d 1222, 1239-40 (3d Cir. 1986), *cert. denied*, 479 U.S. 1031 (1987), cast doubt on developers' ability to ensure interoperability; however, those doubts largely were resolved in the early 1990's, when the Second, Ninth and Federal Circuits expressly rejected the extension of copyright to protect those functional elements required to ensure program compatibility, and the Ninth Circuit held that a list of user commands for a computer program was not copyrightable subject matter.[6] Thus, for most of the industry's life, it has grown and prospered in an environment in which the scope of copyright protection was carefully circumscribed and hence fostered the development of more interoperable product innovations.

As for amici's second point, in language disturbingly reminiscent of the "sweat of the brow" theory, their argument presupposes that if copyright protection is not extended to functional aspects of output such as menu

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[6] *See Computer Assoc. Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 709-710 (2d Cir. 1992); *Sega Enterprises, Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1524 (9th Cir. 1993); *Atari Games Corp. v. Nintendo of America, Inc.*, 975 F.2d 832, 839 (Fed. Cir. 1992); *Ashton-Tate v. Ross*, 916 F.2d 516, 521 (9th Cir. 1990).

trees, the developer will not be able to obtain any intellectual property rights in the work. However, denying copyright protection to Lotus' menu command hierarchy does nothing toward denying such protection to other elements rightfully protected by copyright. Further, the Lotus amici have also seemingly forgotten another primary source of federal intellectual property right protection – the patent laws. (Lotus' parent, IBM, has not suffered any similar memory lapse, having obtained a patent on a menu command hierarchy. *See* JA 856-863.)

We believe that amici's oversight is significant. If one approaches the issue as if the mere circumscription of copyright protection for functional aspects of program outputs strips those aspects of all protection, the inclination may well be to err on the side of overprotection. This, however, ignores the protections available through the patent system, a far superior vehicle for providing protection for deserving functional aspects of program outputs. The patent claim process allows both the developer and its competitors to know at the outset the boundaries of the developer's property rights; it enables a competitor, through the re-examination process, to test the validity of the developer's rights without having to first produce the competing product and take a chance on being sued; and, by requiring proof that the work be new and not obvious, it protects against unjustified monopolies. As one commentator recently observed, the dynamics of this case would have been quite different under the patent laws:

> If Lotus had been granted a patent on all these aspects of 1-2-3, Borland could have requested re-examination by the PTO for a relatively small

> fee, and would then have known whether or not it could use these aspects of Lotus 1-2-3 in Quattro. . . . If the menus and macro language of 1-2-3 had been patented, rather than copyrighted, it is conceivable that Borland could have designed around the patent claims. At least, Borland would have had very clear notice of the extent of the property rights to which Lotus was entitled. Instead, it was left to a federal district court judge to decide that Lotus was entitled to a copyright in the menus and macro language, even though no copyright for these aspects of the software was ever filed, examined, or granted.[7]

Patent is the proper province for functional elements of a software program. In fact, patents have already issued on menu command hierarchies. *See* JA 842, 856 (selected portions of U.S. Patent Nos. 4,989,141; 4,611,306). If a functional element can withstand the rigors of patent examination, upon the patent's issuance the holder has a contract with the United States for a monopoly reasonably limited in time. To afford copyright protection to such functional elements is to effectively grant protection which is tantamount to patent protection (without the prerequisites for patent protection such as novelty and nonobviousness), but for anywhere from more than three to ten times as long. As is sometimes said, "you can't have it both ways."

At the least, through the patent process Borland would have had very clear notice of the extent of the

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[7] Nelson R. Capes, *The Software Copyright "Super Patent,"* 11 Computer Lawyer 8,14 (June 1995).

property rights to which Lotus was entitled. Instead, it was left to a federa' district court judge to decide that Lotus was entitled to a copyright in the menus and macro language, even though no filing, examination, and issuance would have occurred as would be the case in the more appropriate patent arena.

We agree with one commentator's conclusion that "*Lotus v. Borland* illustrates the dangers inherent in [copyright's] ex-post, time-of-infringement approach to determining the scope of protection," under which "an early developer can carve out a potentially lucrative realm of protection at very little cost and without notifying competitors of exactly what is being protected." *Id.* at 15. The "lucrative realm," however, would be an unearned windfall if copyright protection were to run to such functional aspects as Lotus' menu command hierarchy. In our view, the First Circuit's circumscription of copyright protection is fair to the software developer, fair to its competitors, and better for the industry as a whole.

Furthermore, the First Circuit decision properly implements the balanced objectives of copyright as detailed in the CONTU Final Report at 12: "[t]o provide reasonable protection for proprietors without unduly burdening users of programs and the general public, the following statements concerning program copyright ought to be true:

(1) Copyright should proscribe the unauthorized copying of these works.

(2) Copyright should in no way inhibit the rightful use of these works.

(3) Copyright should not block the development and dissemination of these works.

(4) Copyright should not grant any more economic power than is necessary to achieve the incentive to create."

IV. CONCLUSION

For all of the foregoing reasons, we ask this Court to affirm the decision of the First Circuit.

Respectfully submitted,

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